

### ABSTRACT OF THE DISCLOSURE

A method of and apparatus for measuring line profile asymmetries in microelectronic devices comprising directing light at an array of microelectronic features of a microelectronic device, detecting light scattered back from the array comprising either or both of one or more angles of reflection and one or more wavelengths, and comparing one or more characteristics of the back-scattered light by examining data from complementary angles of reflection or performing a model comparison.